# GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

#### **MEMORANDUM**

TO:

Sara Bardin

Director, Office of Zoning

FROM:

Samuel Zimbabwe

Associate Director

DATE:

November 24, 2014

**SUBJECT:** 

Zoning Commission Case No. 08-07A – 2255 Martin Luther King Jr. Avenue SE

## **PROJECT SUMMARY**

Four Points, LLC and Curtis Properties, Inc. (the "Applicant") seek second stage approval for a Planned Unit Development ("PUD") and related modification to an approved PUD to permit construction of a six-story residential development at Square 5785, Lot 839 and part of Lot 906. The project is comprised of the first building part of the larger Curtis Properties development in the Anacostia neighborhood, which overall contains nine mixed-use buildings. This Building 1 consists of 71 residential units, served by 26 parkings spaces located in an underground parking garage.

# **SUMMARY OF DDOT REVIEW**

The District Department of Transportation (DDOT) is committed to achieving an exceptional quality of life in the nation's capital by encouraging sustainable travel practices, constructing safer streets, and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within, and take advantage of, the District's multimodal transportation network.

The purpose of DDOT's review is to assess the potential safety and capacity impacts of the proposed action on the District's transportation network and, as necessary, propose mitigations that are commensurate with the action. After an extensive, multi-administration review of the case materials submitted by the Applicant, DDOT finds:

## Site Design

 Vehicle, loading, and trash access is proposed via an alley requiring one new curb cut, and is in keeping with DDOT's approach to site access; and  The primary pedestrian access point is located at the corner of Chicago Street and Martin Luther King Jr. Avenue

## **Travel Assumptions**

- The Applicant utilized sound methodology and assumptions;
- Future residents are likely to utilize transit, walking, and bicycling, thus the mode split proposed is appropriate;

## Analysis

- The action is projected to minimally increase travel delay in the area;
- Existing transit service, pedestrian infrastructure, and bicycle infrastructure has capacity to accommodate future demand; and
- The Applicant proposes to provide an adequate number of long-term bicycle parking spaces in bicycle storage rooms.

## Mitigations

There are no direct mitigations necessary as part of this first building in the development program beyond the TDM plan proposed.

#### **Continued Coordination**

Given the complexity and size of the action, the Applicant is expected to continue to work with DDOT on the following matters:

- The installation of at least four short-term bicycle parking spaces, with their location to be determined during the public space permitting process;
- For each subsequent Stage 2 PUD submission, DDOT expects the Applicant to evaluate its consistency with this and the Stage 1 analysis;
- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, and other features within the public rights of way, are expected to be designed and built to DDOT standards. Careful attention should be paid to pedestrian and bicycle connections along the site's perimeter and adjacent infrastructure; and
- DDOT expects traffic signals to stay in the existing locations and with current operations for this
  first building. However, signals may need modification to change movements and with the
  adjustment of street geometry for the completion of the project. Signal modification will be
  coordinated as part of those Stage 2 PUDs to optimize performance of the road network while
  providing ample pedestrian crossing time.

#### TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission perform a Comprehensive Transportation Review (CTR) in order to determine the PUD's impact on the overall transportation network. Accordingly, an applicant is expected to show the existing conditions for each transportation mode affected, the proposed impact on the respective network, and any proposed mitigations, along with the effects of the mitigations on other travel modes. A CTR should be performed according to DDOT direction. This Applicant and DDOT coordinated on an agreed-upon scope for the CTR that is consistent with the scale of the action.

The review of the analysis is divided into four categories: site design, travel assumptions, analysis, and mitigations. The following review provided by DDOT evaluates the Applicant's CTR to determine its accuracy and assess the action's consistency with the District's vision for a cohesive, sustainable transportation system that delivers safe and convenient ways to move people and goods, while protecting and enhancing the natural, environmental, and cultural resources of the District.

## Site Design

Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed development, making site design a critical aspect of DDOT's development review process. Accordingly, new developments must provide a safe and welcoming pedestrian experience, enhance the public realm, and serve as positive additions to the community.

#### Site Access

The Applicant proposes an access easement for a single curb cut on Shannon Place for a new private alley to serve the proposed Building 1, as well as the future Building 2, connecting to the existing public alley from Chicago Street. This will accommodate vehicular, loading, and trash access. The proposed site access location complies with DDOT's approach to site access. Two curb cuts, one along Martin Luther King Jr. Avenue and one along Chicago Street, will be closed. A permit for the proposed alley curb cut will be needed.

Therefore, all vehicular traffic will access the building via either Shannon Place or Chicago Street. The primary pedestrian access point is located at the corner of Chicago Street and Martin Luther King Jr. Avenue. Figure 1 shows the site layout for this project.

### Loading

DDOT's practice is to accommodate vehicle loading in a safe and efficient manner, while at the same time preserving safety across non-vehicle modes and limiting any hindrance to traffic operations. For new developments, DDOT requires that loading take place in private space and that no back-up maneuvers occur in the public realm. This often results in loading being accessed through an alley network.

While additional loading facilities are necessary, a 30' berth is provided, which should adequately serve this building's needs. The provided loading dock is located adjacent to the proposed garage entrance, and is served via the alley. The Applicant's proposed loading locations comply with DDOT's loading requirements and their analysis includes AutoTurn turning movements showing that truck maneuvers can be accommodated via the alley, in keeping with DDOT standards.



Figure 1. Site Design and Access (Source: Gorove/Slade)

## Streetscape and Public Realm

In line with District policy and practice, any substantial new building development or renovation is expected to rehabilitate streetscape infrastructure between the curb and the property lines. This includes curb and gutters, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the Site. At this property, two existing curb cuts will be removed. Additionally, new sidewalk along Martin Luther King Jr. Avenue will be provided, which DDOT would like to see at 10' width due to the potential for high pedestrian traffic in this area. Considering the right of way constraint here, some portion of this sidewalk may need be placed on private development property.

The Applicant must work closely with DDOT and the Office of Planning to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. In conjunction with the District of Columbia Municipal Regulations, DDOT's *Design and Engineering Manual* will serve as the main public realm references for the Applicant. As such, all public space shall be designed and constructed to DDOT standards.

Additionally, DDOT's preference is for electrical vaults to be located on private space. The Applicant's preliminary public space plans show electric vaults located in private space along the alley.

DDOT's lack of objection or discussion of other public space elements as part of this zoning action should not be viewed as an approval of public space elements. Final design of the public space will be determined during DDOT's public space permitting process.

## **Travel Assumptions**

The purpose of the CTR is to inform DDOT's review of a proposed action's impacts on the District's transportation network. To that end, selecting reasonable and defensible travel assumptions is critical to developing a realistic analysis.

#### Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants to account for future growth in traffic on the network or what is referred to as background growth. The Applicant coordinated with DDOT on the appropriate travel forecasting methodology to include in the analysis. Specifically, the Applicant used an appropriate growth rate as a basis to estimate future volumes.

## <u>Parking</u>

The overall parking demand created by the development is primarily a function of land use, development square footage, and price/supply of parking spaces. However, in urban areas, other factors contribute to the demand for parking, such as the availability of high quality transit, frequency of transit service, and proximity to transit.

26 off-street parking spaces are proposed for the site within the parking garage, while 36 were required by zoning. This equates to a parking ratio of 0.37 parking spaces per residential unit. Generally, this is a reasonable supply of parking for the land use and location, given its close proximity to the Metro station. The Applicant conducted a survey of available on-street parking nearby, and also found availability with over 60% of spots typically available. Figure 2 shows the nearby available street parking. However, it is not anticipated demand from this building will lead to needed on-street parking.

Table 4: Summary of On-Street Parking

		fternoon (2pn	n)	Evening (8pm)				
Space Type	Inventory	Occupancy	Utilization	Inventory	Occupancy	Utilization		
Residential Permit Parking (RPP)	415	186	45%	415	184	44%		
Unrestricted	1223	444	36%	1280	418	33%		
Other	8	4	50%	8	1	13%		
All On-Street Spaces	1646	634	39%	1703	603	35%		

Figure 2. Summary of On-Street Parking (Source: Gorove/Slade)

#### **Trip Generation**

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual, which was supplemented to account for the urban nature of the site.

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, and transit. The means of travel is referred to as a 'mode' of transportation. A variety of elements impact the mode of travel, including density of development, diversity of land use, design of the public realm, availability and cost of parking, among many others. The assumed mode split was based on census information and the *WMATA Ridership Survey* for the area. DDOT generally finds this method appropriate.

Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of weekday peak hour trip generation:

Table 5: Trip Generation for Building 1 by Mode

Twin Company has been dilled 9 840 de		Д	M Peak Ho	our	PM Peak Hour			
Trip Generation by Land Use & Mode		In	Out	Total	In	Out	Total	
Transit Person-Trips	45%	4	16	20	19	9	28	
Walking Person-Trips	7%	1	2	3	3	2	5	
Bicycling Person-Trips	3%	0	1	1	1	1	2	
Vehicular Person-Trips	45%	4	15	19	18	10	28	
Vehicle-Trips		4	14	18	17	9	25	

Figure 3. Weekday Peak Hour Vehicle Trip Generation (Source: Gorove/Slade)

#### Study Area and Data Collection

The Applicant in conjunction with DDOT identified six intersections where detailed vehicle, bicycle, and pedestrian counts would be conducted and a level of service analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that have the greatest potential to see impacts in vehicle delay. DDOT acknowledges that not all affected intersections are included in the study area and there will be intersections outside of the study area that would realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action. Further, additional intersections will be analyzed as part of the ultimate build-out for this PUD.

The following intersections were selected:

- 1. Martin Luther King Jr. Avenue & W Street SE
- 2. Martin Luther King Jr. Avenue & Maple View Place SE
- 3. Martin Luther King Jr. Avenue & Pleasant Street SE
- 4. Martin Luther King Jr. Avenue & Chicago Street SE
- 5. Martin Luther King Jr. Avenue & Morris Road SE
- 6. Chicago Street & Shannon Place SE

The Applicant collected weekday intersection data in June 2014. DDOT agrees with the timeframe and collection date.

#### **Analysis**

To determine the action's impacts on the transportation network, a CTR includes an extensive multi-modal analysis of the existing baseline conditions, future conditions without the proposed action, and future conditions with the proposed development. The Applicant completed their analysis based on the assumptions described above.

## Roadway Capacity and Operations

DDOT aims to provide a safe and efficient roadway network that provides for the timely movement of people, goods and services. As part of the evaluation of travel demand generated by the site, DDOT requests analysis of traffic conditions for the agreed upon study intersections for the current year and after the facility opens both with and without the site development or any transportation changes.

Analysis provided by the Applicant shows that the project's primary impact occurs on the eastbound approach at the intersection of Martin Luther King Jr. Avenue and Chicago Street SE during the AM peak hour, where it is expected to experience a marginal increase in delay of as a result of the action. The proposed mitigation for this increase in delay is addressed in the Mitigations section of this report.

	Approach	Existing Conditions (2014)			Future Background Conditions (2017)			Total Future Conditions (2017)					
Intersection		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Martin Luther King, Jr. Avenue & W Street SE	Overall	5.8	Α	18.4	В	5.5	Α	18.0	В	5.5	Α	17.9	В
	Eastbound	48.0	D	82.9	F	48.0	D	82.9	F	48.0	D	82.9	F
	Northbound	4.4	A	4.3	A	4.0	Α	4.3	Α	3.9	A	4.2	A
	Southbound	3.8	Α	8.3	Α	3.9	Α	9.1	Α	4.0	Α	9.3	Α
Martin Luther King, Jr. Avenue & Maple View Place SE	Westbound	12.8	В	13.2	В	13.0	В	14.4	В	13.1	В	14.5	В
	Southbound Left	0.1	Α	0.1	Α	0.1	Α	0.1	Α	0.1	А	0.1	Α
Martin Luther King, Jr. Avenue & Pleasant Street SE	Westbound	28.9	D	35.3	Е	32.6	D	43.5	Е	33.4	D	44.5	Е
	Southbound Left	1.2	Α	2.1	Α	1.0	Α	2.2	Α	1.0	Α	2.2	Α
Martin Luther King, Jr. Avenue & Chicago Street SE	Overall	9.5	Α	10.7	В	11.4	В	20.8	С	12.4	В	24.4	С
	Eastbound	52.4	D	56.3	Е	53.9	D	128.2	F	58.5	E	153.1	F
	Northbound	1.0	Α	1.0	A	1.9	A	1.1	А	2.0	A	1.1	Α
	Southbound	19.9	В	13.1	В	20.4	С	12.7	В	20.4	С	12.7	В
Martin Luther King, Jr. Avenue & Morris Road SE	Overall	26.0	С	14.8	В	25.4	С	14.4	В	25.4	С	14.4	В
	Westbound	59.5	E	67.4	E	59.8	E	67.4	Е	60.2	E	67.4	E
	Northbound	22.8	C	13.6	В	23.0	C	13.9	В	23.0	C	13.9	В
	Southbound	1.8	Α	2.1	Α	1.5	Α	2.5	Α	1.5	Α	2.4	Α
Chicago Street & Shannon Place SE	Eastbound Left	3.2	Α	5.2	А	3.3	Α	5.2	А	3.3	Α	5.2	Α
	Southbound	9.1	Α	9.3	A	9.7	A	10.1	В	9.9	Α	10.3	В

Figure 4. Peak Hour Capacity Analysis (Source: Gorove/Slade)

All other intersections in the study area are expected to be minimally impacted by the action as measured by LOS. Some approaches at intersections within the study area are projected to operate at failing levels under background conditions and remain at failing levels with only minor increases in vehicle delay. Potential improvements for these locations were also included in the CTR.

## **Transit Service**

The District and Washington Metropolitan Area Transit Authority (WMATA) have partnered to provide extensive public transit service in the District of Columbia. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment.

The site is located approximately .25 miles from the Anacostia Metro station served by Metro's Green line, roughly a 5 minute walk.

The site is also extremely well-served by high-frequency bus routes. Bus routes include:

- 90, 93 U Street-Garfield lines
- A42, 46, 48 Anacostia-Congress Heights lines
- B2 Bladensburg Road-Anacostia line
- P6 Anacostia-Eckington line
- U2 Minnesota Ave.-Anacostia line
- W2, W3 United Medical Center-Anacostia lines

- W8 Garfield-Anacostia loop line
- Circulator Potomac Ave. Metro-Skyland route

Additionally, the DDOT DC Streetcar system plans a route through the Anacostia neighborhood near the site. Therefore, the site is extremely well-served via transit.

#### **Pedestrian Facilities**

The District is committed to enhance the pedestrian accessibility by ensuring consistent investment in pedestrian infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including pedestrian trips. Walking is expected to be an important mode of transportation for this development.

The site generally has good pedestrian access to nearby destinations and transit; however, the Applicant's analysis revealed some substandard pedestrian sidewalks, with widths less than required, and curb ramps, either missing or unacceptable, in the vicinity of the site. As aforementioned in the Site Access section, the Applicant will be expected to upgrade some of these facilities. Specifically, a ramp at Chicago Street and Shannon Place will need to be updated.

As discussed, the Applicant will be expected to work with DDOT through the public space permitting process. DDOT expects the Applicant to meet all DDOT standards for pedestrian facilities. This includes sidewalks, exclusive of the tree box planting area, to be a minimum 10 feet on Martin Luther King Jr. Avenue along the site.

## **Bicycle Facilities**

The District of Columbia is committed to enhance bicycle access by ensuring consistent investment in bicycle infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including bicycling trips.

The site is currently moderately-served by bicycle infrastructure. The Anacostia Riverwalk Trail is a primary biking route in this area. Additionally, three Capital Bikeshare stations with 33 total docking stations, including one location at the Anacostia Metro station, are located near the site.

The Applicant's analysis identified short-term bicycle parking spaces in the public space, but did not specify their quantity. The Applicant will be expected to provide at least 4 bicycle parking spaces adjacent to their building for public use. The exact location of short-term bicycle facilities will be determined during the public space permitting process. The Applicant has also committed to provision of 37 long-term bicycle parking spaces within the parking garage.

## <u>Safety</u>

DDOT requires that the Applicant conduct a safety analysis to demonstrate that the site will not create new, or exacerbate existing safety issues for all travel modes. DDOT asks for an evaluation of crashes at study area intersections as well as a site distance analysis along the public space where there is expected to be conflicts between competing modes (e.g. crosswalks, driveway entrances, etc.).

The Applicant's analysis of DDOT crash data reveals three intersections within the study area that have a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. A significant portion of the crashes are designated as "side swipe" crashes. The following three intersections were noted:

- 1. Martin Luther King Jr. Avenue & W Street SE
- 2. Martin Luther King Jr. Avenue & Chicago Street SE
- 3. Chicago Street & Shannon Place SE

Because of the low number of vehicle trips associated with the action, the action is not expected to significantly exacerbate the existing conditions at the high crash intersections.

## Mitigations

As part of all major development review cases, DDOT requires the Applicant to mitigate the impacts of the development in order to positively contribute to the District's transportation network. The mitigations must sufficiently diminish the action's vehicle impact and promote non-auto travel modes. This can be done through Transportation Demand Management (TDM), physical improvements, operations, and performance monitoring.

DDOT preference is to mitigate vehicle traffic impacts first through establishing an optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, TDM measures may be necessary to manage travel behavior and minimize impacts. Only when these other options are exhausted will DDOT consider capacity-increasing changes to the transportation network because such changes often have detrimental impacts on non-auto travel and are often contrary to the District's multi-modal transportation goals.

#### Site Circulation, Operations, and Design

The site should be designed in a manner to facilitate internal movement of people and vehicles such that the potential impacts to the external transportation network are minimized. When potential impacts are unavoidable, operational changes such as signal timing changes may be an effective way to manage a site's potential transportation impact.

The Applicant proposes to mitigate the vehicle delay at the impacted intersection via signal changes and potential geometric changes resulting in reduced on-street parking on Chicago Street. However, it is anticipated that future phases of this development will result in further impacts. Thus, the Applicant should plan to coordinate with DDOT during those future zoning actions and during permitting at that time to determine the appropriateness of the recommended adjustments.

## **Transportation Demand Management**

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive Transportation Demand Management (TDM) plan to help mitigate an action's transportation impacts. TDM is a set of strategies, programs, services, and physical elements that influence travel behavior by mode, frequency, time, route, or trip length in order to help achieve highly efficient and sustainable use of transportation facilities. In the District, this typically means implementing infrastructure or programs to maximize the use of mass transit, bicycle and pedestrian facilities, and reduce single occupancy vehicle trips during peak periods. The Applicant's proposed TDM measures play a role in achieving the desired and expected mode split.

The specific elements within the TDM plan vary depending on the land uses, site context, proximity to transit, scale of the development, and other factors. The TDM plan must help achieve the assumed trip generation rates to ensure that an action's impacts will be properly mitigated. Failure to provide a robust TDM plan could lead to unanticipated additional vehicle trips that could negatively impact the District's transportation network.

The Applicant proposed the following TDM strategies:

- "A member of the property management group will be a point of contact and will be responsible
  for coordinating, implementing, and monitoring the TDM strategies. This would include the
  development and distribution of informational and promotional brochures to visitors, patrons,
  and employees regarding transit facilities and services, walk and bicycle facilities and linkages,
  and car sharing."
- "The project website will provide links to existing resources such as www.goDCgo.com, which
  provides transportation information and options for getting around the District. In addition, an
  electronic message board will be placed in the lobby that displays information such as real-time
  transit information for the closest bus or rail stops and bikes available at nearby Capital
  Bikeshare stations."
- "Residents will be offered a SmarTrip card pre-paid with \$20 to encourage the use of transit to be distributed when moving in. This program will be limited to one card per unit, and will only be employed on the initial move-in."
- "The Applicant will provide a secure room inside the garage for long-term resident bicycle
  parking, and some racks outside for visitor or short-term bicycle parking. The development will
  provide a total of 37 secure bicycle parking spaces for use by residents in the parking garage."

These TDM measures, if implemented as planned, will encourage the use of alternative modes of transportation. However, some additional elements are possible. Additionally, the final element proposed as part of the Applicant TDM plan is long-term bicycle parking spaces, but these are required, and are thus not considered a TDM amenity and should not be listed as such.

Additional TDM measures will be expected in the future as the full-scale development program comes online, however may not be appropriate for this initial building. These future measures may include:

- Provision of a Capital Bikeshare membership amenity for at least 5 years. If the lease duration is shorter than one year, the memberships in the bikeshare and car share program may be reduced to match the duration of the lease.
- Provision of a carsharing membership amenity for at least 5 years. If the lease duration is shorter than one year, the memberships in the bikeshare and car share program may be reduced to match the duration of the lease.
- Provision of at least four bicycle helmets for distribution to new residents in each new building.
- Provision of a bicycle repair facility (a basic fix-it station with tools and air pump securely attached to a stand that includes all the tools necessary to perform basic repairs and maintenance, from changing a flat to adjusting brakes and derailleurs) within or adjacent to the long-term bicycle storage area(s).

For this initial building, the TDM measures are largely adequate. Accordingly, DDOT requests only the following TDM commitment to add additional plan element details:

• Install at least four short-term bicycle parking spaces for public access. The exact location of short-term bicycle parking spaces will be determined during the public space permitting process.

With this insertion, DDOT finds the TDM plan to be sufficient to encourage non-auto travel and support the high non-auto mode split assumed in the analysis.

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